**THE CLAIMS:**

1-21 (cancelled).

22 (previously presented). A method of forming a self-aligning alignment dot on an end surface of a waveguide for self-aligning the waveguide with a second waveguide, the method comprising:

applying a mask to an end surface of the waveguide;

ablating a portion of the mask by exposing the mask to a high energy light beam traveling through the waveguide to create a mask opening; and

filling the mask opening with an optical material to form a self-aligning dot, the optical material having a melting point and when melted in the proximity of a second alignment dot on a second waveguide, surface tension pulls the waveguide and the second waveguide into alignment with each other.

23 (original). The method of claim 22 further comprising:

removing the mask from the end surface of the waveguide.

24 (original). The method of claim 22, wherein ablating a portion of the mask further comprises:

ablating the portion of the mask with an ablating light.

25 (original). The method of claim 24 further comprising:

coupling an optical probe to the waveguide to provide the ablating light.

26 (cancelled).

27 (original). The method of claim 25 further comprising:

positioning the optical probe in a probe region above the waveguide, the probe region having an upper cladding of approximately 0-3 microns.

28 (original). The method of claim 25, wherein the ablating light is an UV light.

29 (original). The method of claim 22, wherein the waveguide is an optical fiber.

30 (original). The method of claim 29 further comprising:

aligning a far end of the optical fiber to a light source;

forming the self-aligning alignment dot on an opposite end of the optical fiber;

cutting off a segment of optical fiber with the self-aligning alignment

dot; and

forming another self-aligning alignment dot on the opposite end of the optical fiber without re-aligning the far end of the optical fiber.

31 (original). The method of claim 22, wherein the waveguide is a planar waveguide.

32 (original). The method of claim 22, wherein the optical material comprises a polymer or a sol-gel.

33 (previously presented). A method of forming a self-aligning alignment dot on an end surface of a waveguide, the method comprising:

applying a photo sensitive optical material to an end surface of the waveguide;

exposing the photo sensitive optical material to a light beam traveling through the waveguide, the light beam having a wavelength that cures the photo sensitive optical material to create a cured portion of the photo sensitive optical material and an uncured portion of the photo sensitive optical material; and

removing the uncured portion of the photo sensitive optical material, the cured portion of the photosensitive material forming the alignment dot, the alignment dot having a melting point and when melted in the proximity of a

second alignment dot on a second waveguide, surface tension pulls the waveguide and the second waveguide into alignment with each other.

34-40. (cancelled).